CONSERVATION ELEMENT OF THE GENERAL PLAN OF THE CITY OF ALAMEDA

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Alameda City Planning Department

Alameda, California

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I. INTRODUCTION

The rapid growth and urbanization of our county has been "accomplished" largely through the gluttonous use of our natural resources - air, water, and land. These resources were considered by many to be unlimited, and to be consumed by mankind for so-called "progress". This mentality persisted for many years, objected to by only a seemingly small minority.

Recently, however, the extent of air and water pollution, the gradual but continuing loss of forest and grazing lands coupled with the recognition by more and more people that natural resources are indeed, finite, has led to an increasing awareness of the physical and psychological need for retention and enhancement of our natural resource heritage.

California is one of the richest in natural resources of any state. At the same time it is the most populous, and one of the fastest growing states, although the growth rate has slowed considerably in the last few years.

Perhaps because of the continuing, sometimes reckless, depletion of natural resources nation-wide, and in California particularly, the state legislature in 1971, required each City and County to adopt a Conservation Element as part of its General Plan.

The following section, extracted from the Government Code of the State of California, contains the legislative mandate to prepare such an element.

"The General Plan shall consist of . . . A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies which have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared. The conservation element may also cover:

(1) The reclamation of land and waters,

(2) Flood control,

(3) Prevention and control of the pollution of streams and other waters,

(4) Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan,

(5) Prevention, control, and correction of the erosion of soils, beaches, and shores.

(6) Protection of watersheds,

(7) The location, quantity and quality of the rock, sand and gravel resources.

The conservation element shall be prepared and adopted no later than June 30, 1973".

The impact of this legislation on Alameda is not severe as the City's land area is essentially completely urbanized. The major effect of this legislation and the major emphasis of this element is the maintenance, restoration or enhancement of Alameda's water areas, its principal and singular most important natural resource. Because of the unique geographical nature of Alameda and the influence of other controlling agencies, the primary concern is of the quality, rather than quantity of water areas.

The General Plan presently contains a Utilities Element which in part includes policies, for storm water and sanitary sewer facilities. Such policies are directed toward a reduction in the amount of pollutants discharged into the water areas surrounding Alameda. The conservation element is intended to complement and reinforce that Utilities Element.

In accordance with State law, (see above) the goals and policies of this conservation element are developed in coordination with the existing goals and policies of the San Francisco Bay Region Water Quality Control Board. (See Appendix A)

II. THE NEED

A. Land Area

The City occasionally experiences flooding due to heavy rains and sometimes when coupled with high tides. The major and most frequent flooding occurs in the northwest section of town. While this flooding may be due to low elevation and the proximity to tidal waters, the consequences of such flooding only slightly

affect water quality and for a limited period of time. Measures to prevent or limit instances of such flooding would, however, be a wise undertaking.

The State Beach Park was created in the mid-1950's as a part of the South Shore fill project as a relatively wide swimming beach with a slope of approximately 20:1. Since then, there has been a gradual, but consistent erosion of the sand, despite concerns to prevent such occurences. At present the beach has a slope of about 200:1 and is no longer considered a prime swimming facility.

During high tides, the beach is all but eliminated in various locations and the fine sand material has assumed a very flat angle of repose. In addition, blowing, drifting sand has caused numerous problems to private property owners, the Regional Park District and city maintenance crews alike.

In order to preserve this southerly shoreline as an open accessible and usable facility, steps need now be taken and a continuing program established to arrest these eroding conditions of San Francisco Bay's major beach.

Alameda has a strong heritage of trees; at one time, the City was dotted by many oak and other native trees. Agriculture and subsequently urbanization have since caused the removal of many of them. Preservation of existing significant examples of trees on public as well as on private property should be encouraged. Efforts might also be directed toward tree replanting programs.

Conservation and preservation of the water areas surrounding Alameda should be coupled with the setting aside of selected land areas to provide pleasant vistas thereby increasing the visual enjoyment potential for Alamedans and their visitors.

B. Water Area

The quality of the water surrounding Alameda is a result of many factors. "Recent studies, however, have clearly shown that the most significant factor contributing to the present Bay pollution is the municipal and industrial wastes generated within the Bay Area",[1] While solutions to polluted water in the Bay surrounding Alameda will require a regional effort, local agencies must all contribute to this effort.

The City of Alameda has made significant contribution to the improvement of water quality, through long-established programs of storm water drainage and sanitary sewerage separation, modernization and maintenance and the delivery of all sanitary sewerage to

[1] Clean Water for San Francisco Bay - State Water Resources Control Board, April 1971

Sanitary District #1 of East Bay Municipal Utility District for treatment. These programs should be continued.

Along the southern and eastern edges of Alameda, are found extensive marshes and mudflats. While perhaps not the most attractive part of the shoreline, mudflats serve an important function, that of providing an environment which supports a variety of life forms essential to higher forms of animal and plant life. These mudflats, which are rich in aquatic life forms and provide feeding grounds for numerous shorebirds, also aid in our fight against air pollution. Mud algae produces oxygen, which helps abate pollution.

Marshes, similarly, are an important part of the natural marine environment surrounding Alameda. The marshes produce many plants; cord grass (spartina) and pickleweed (salicornia) are, however, most prevalent.

Cord grass is unique in that it cannot be planted from seed, and transplanting it is very difficult. Alameda has a rather large stand of this plant along the South Shore, between Park Street and the Bay Farm Island bridge. This plant type is rich in nutrients; per acre it produces from 5 to 10 times as much as wheat. It traps debris and checks erosion; it traps sediment and builds drier and higher ground as roots form into clumps and into hummocks that become nesting sites for birds or homes for small animals.

Urbanization has contributed to the loss of much tidelands environment; and care should be exercised to conserve and protect what remains.

III. CONSERVATION GOALS.

The following goals and policy statements are based on the assumption that the water areas surrounding Alameda are large and varied enough to accommodate a great range of activities, from passive wildlife protection to active water recreation.

1. Maintain and enhance the quality of tidal water surrounding Alameda,

2. To the extent feasible, and consistent with other demands on the water area, encourage provisions for active recreation uses of the water,

3. To the extent feasible, and consistent with other demands on the water area, protect tidal areas for beneficial uses by flora and fauna,

4. Maximize citizen use and enjoyment of San Francisco Bay and its adjunct water areas.

IV. CONSERVATION POLICIES

The following policies are based on the above goals:

1. Continue Alameda's program of storm water and sanitary sewerage modernization, separation and maintenance.

2. Storm water drainage should be improved in those areas of the City in which persistent flooding occurs. These areas are primarily:

   a. Along the "Segregation Line" from Main Street to Wood Street
   b. Webster Street north of the "Segregation Line"
   c. Main Street north between Ave. "C" and the "Main Gate" of Alameda Naval Air Station.

3. Encourage additional small boat angling access facilities.

4. Encourage development of better pedestrian access along the shoreline, including a link between the San Francisco and San Leandro Bays.

5. Encourage development of vista points and fishing opportunities.

6. Encourage improvement in recreational waterways, including selective dredging.

7. Encourage programs by appropriate regional or other agencies to improve, protect and preserve the beach areas along the South Shore.

8. Prohibit land filling of tidelands, marshlands, or submerged lands within the City of Alameda except in those cases in which a public need is met by such filling, and in which approval is granted by the appropriate regional agency or agencies.

9. Discourage any reduction or destruction of marshlands containing unique or rare plant or animal life, except where the transplanting of cord grass is deemed important and necessary.

10. Encourage preservation and conservation of significant or notable trees, and encourage the establishment of replanting programs.

V. IMPLEMENTATION

The following initial implementation steps should be undertaken;

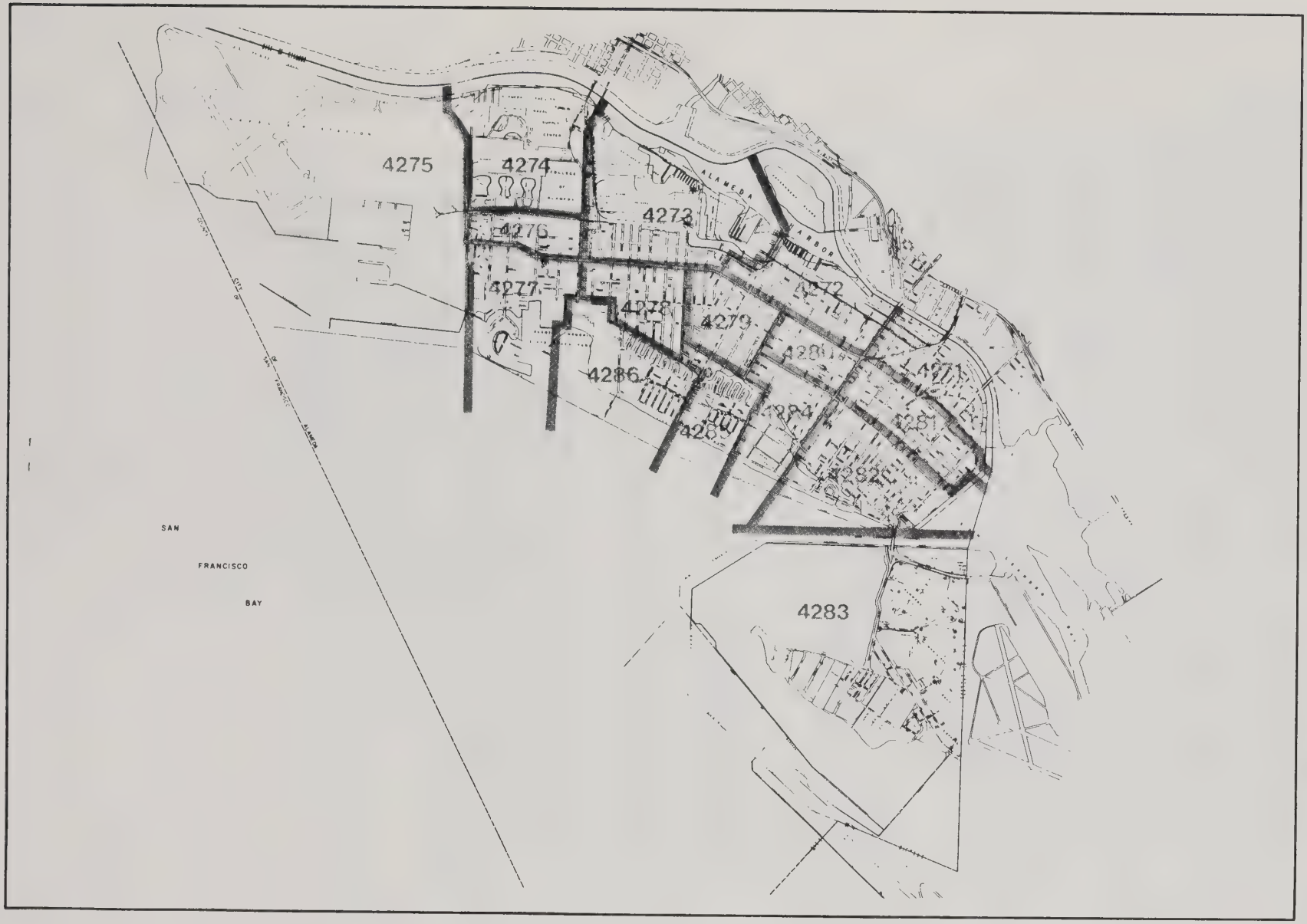
1. The "O" District, part of the Zoning regulations for some time, is intended to preserve open space and should be put to use. The water areas within the City of Alameda should be rezoned to "O" Open Space. Those areas recommended for initial rezoning to the "O" District are shown in Map 1.

2. Federal and State programs should be reviewed for their applicability to Alameda and conservation goals, and utilized to the fullest extent possible (see Appendix B).

VI. MAINTENANCE

To be effective in reaching the conservation goals, this element must be reviewed periodically. According to Kent, in the Urban General Plan, "It is essential, for both technical and political, that the plan be maintained as an expression of the best current judgment of the City Council".[1]

[1] T. J. Kent, Jr. - The Urban General Plan, 1964, p. 127



CONSERVATION ELEMENT

MAP 1

Possible
Open Space
Zoning

CITY OF ALAMEDA

NORTH

scale in feet

city planning department 1970

APPENDIX A - POLICY GUIDELINES, INTERIM WATER QUALITY CONTROL PLAN - STATE WATER RESOURCES CONTROL BOARD

GOALS

It is this Board's intention to use these water quality goals in regulating water quality factors:

1. The quality of all waters in the Basin is to be continuously protected from the adverse effects of controllable water quality factors.

2. The quality of all waters in the Basin will be maintained and enhanced to the highest possible levels.

3. Municipal and industrial wastewaters will be managed as part of an integrated system of fresh water supplies to achieve maximum benefit of fresh water resources for present and future beneficial uses, and to achieve environmental protection and enhancement.

4. The most effective use of fresh water and protection of the environment will ultimately be achieved by maximum feasible reclamation and reuse of municipal, industrial and agricultural wastewaters.

MANAGEMENT PRINCIPLES

This Board will be guided by the following management principles in achieving the above goals:

1. Subregional and regional sewerage planning is to be encouraged as the most effective means of

   a. Achieving the above goals at the earliest possible date.
   b. Minimizing the investment of public and private funds in sewerage and industrial westewater facilities.
   c. Implementing consolidations of facilities necessary to achieve: 1) better discharge locations; 2) more efficient and continuous operation of facilities, and; 3) improved reclamation options.
   d. Assuring planned growth of sewerage systems.

2. Proven methods for achieving the above goals are to be relied upon until the engineering and financial feasibility of alternate methods are adequately documented.

3. Reclamation is encouraged as part of subregional and regional programs.

4. Discharge of wastewaters to surface waters in the Basin is considered to be:

   a. An interim means for disposing of reclaimable wastewater until a feasible project for reuse is developed.
   b. A means for disposing of adequately treated blowdown, or
   c. An emergency outlet for peak flows.

5. Projects for which Federal-State construction grants are requested will be required to:

   a. Conform to approved subregional programs.
   b. Be designed and operated so as to achieve the maximum protection and enhancement of Basin waters.
   c. Be supported by ordinances requiring source control of persistent deleterious materials.
   d. Conform to appropriate regional land use plans.

6. Discrete industrial waste dischargers are encouraged to implement programs to:

   a. Reduce the volume of wastewater discharged to surface waters.
   b. Control persistent deleterious materials at their source.
   c. Prevent accidental spills of deleterious materials.
   d. Use reclaimed municipal wastewater.

7. Communities will be required to control peak wet weather flows so as to comply with water quality objectives contained in this Plan.

8. This Board will continue to implement the following statements of policy:

Resolution No. or Motion Date	Subject
81	Sewer Drainage Wells
226	Niles Cone Groundwater Quality
Sept. 20, 1962	Introduction of fertilizers and chemicals into water wells
Aug. 20, 1964	Regulation of annexations to sewerage systems under enforcement proceedings
768	Sewering Urbanizing Areas
May 18, 1967	Regulation of oil and gas wells in the Livermore-Amador Valley
68-32	Dredging Operations
68-38	Regional Sewerage Agency
May 23, 1968	Relative to Final Bay-Delta Report
69-42	Regulation of Waste Disposal onto Land
70-65	Waste Discharges from Vessels
70-100 and 71-8	Ocean Disposal of Wastes

APPENDI - POSSIBLE FUNDING SOURCES (Not necessarily exh tive listing)

Agency	Program	Eligible Activities
East Bay Regional Park District	Property taxes	Planning, acquisition, development and maintenance of parks.
East Bay Regional Park District	Inter-County Parks Foundation	Acquisition and development of parks (This is a memorial fund arrangement for tax-free contributions).
State Wildlife Conservation Board & Dept. of Fish & Game	Wildlife Restoration	Planning, development and acquisition and management of wildlife areas.
U.S. Dept. of Int., Bur. of Outdoor Recreation	Land and Water Conservation	Acquisition, and development of outdoor recreation areas and trails.
U.S.Dept. of Int., Bur of Sport Fisheries & Wildlife	Wildlife Restoration	Acquisition and development of outdoor recreation areas and trails.
Dept. of Def. Off. of the Chfs. of Engineers	Beach Erosion Control	Design and construction of erosion protection projects.
U.S. Dept. of Agric, Soil Conserv. Service	Soil Survey	Dissemination of technical information regarding quality of soil.
U.S. Dept. of Agric, Soil Conservation Svce.	Soil and Water Conservation	Technical Assistance in planning and applying soil and water conservation plans
U.S. Dept. of Agric., Soil Conservation Svce.	Plant Materials for Conservation	Research and testing of new plant materials for soil and water and wildlife conservation
Environmental Protection Agcy., Off. of Air Programs	Air Pollution	Financial assistance for planning, developing, establishing, improving and maintaining air pollution control programs.